

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A Portable portable electronic device—equipment
comprising:

a first manipulator means for supplying a signal for performing a first screen process on
~~an~~ information displayed on a display ~~means~~;

a second manipulator means for supplying a circumferential movement signal for
performing a second screen process on the information displayed on the display, said second
manipulator means including a ring-shaped manipulator having an inner circumference side, an
outer circumference side, and a bottom surface, said second manipulator means for supplying the
circumferential movement signal according to said ring-shaped manipulator means; and

~~a controller means, said controller means controlling for interfacing with~~ said first
manipulator means, said second manipulator means, and ~~said the display means~~; wherein:

said first manipulator means is arranged at either the inner circumference side or
the outer circumference side of said ring-shaped manipulator;

~~wherein,~~ responsive to the signal supplied—input from said first manipulator
means, said controller ~~means—is operable to perform~~ performs the first screen process ~~—of by~~
scrolling ~~a screen displaying the information displayed on the display~~ and selecting a display
position; and

responsive to the circumferential movement signal supplied—input—in a
~~circumferential direction~~ from said second manipulator means, said controller ~~means—is operable~~
to perform ~~performs~~ the second screen process, the second screen process being one of a process
of scaling up the information, scaling down the information, and switching ~~the~~ a screen of
information displayed on the display with the selected display position as a reference.

Claim 2 (Cancelled)

Claim 3 (Currently Amended) The portable electronic ~~equipment~~ device of Claim
1, wherein:

said ring-shaped manipulator is operable to rotate circumferentially; and

~~said second manipulator means includes a rotatable ring-shaped manipulator, and further~~

includes a rotation detector ~~detection means~~ for detecting a direction and an amount of rotation of said ring-shaped manipulator ~~second manipulator means~~.

Claim 4 (Currently Amended) The portable electronic device ~~equipment~~ of Claim 3, wherein:

said rotation detector ~~detection means~~ is disposed on a bottom face arranged so as to interface with the bottom surface of said ring-shaped manipulator; and

said rotation detector ~~detection means~~ comprises:

a ring magnet magnetized according to alternating north and south poles at intervals of an equal angle, and fixed on the bottom surface of said ring-shaped manipulator ~~to a north pole and a south pole alternately at intervals of an equal angle and fixed on the bottom face of said manipulator~~; and

a pair of magnetic sensors arranged so as to be opposed to said ring magnet and arranged with a predetermined clearance between said pair of magnetic sensors and said ring magnet; and

said rotation detector ~~detection means~~ is operable to detect ~~detects~~ movement of said ring magnet ~~above~~ in relation to said pair of magnetic sensors.

Claim 5 (Currently Amended) The portable electronic device ~~equipment~~ of Claim 3, wherein

~~said rotation detection means detects a direction and amount of rotation of said second manipulator means; and~~

said controller is operable to perform ~~means performs~~ the second screen process according to the detected direction and the amount of rotation of said ring-shaped manipulator ~~a screen process, the screen process being one of scaling up, scaling down, and switching a displayed screen.~~

Claim 6 (Currently Amended) ~~The portable~~ A portable electronic device ~~equipment~~ of Claim 1, further comprising:

a circular rubber manipulator having a front and a back;

a first manipulator means for supplying a signal for performing a first screen process on

information displayed on a display, said first manipulator means arranged to interface with the back of said circular rubber manipulator;

a second manipulator means for supplying a circumferential movement signal for performing a second screen process on the information displayed on the display, said second manipulator means arranged to interface with the back of said circular rubber manipulator; and

a controller, wherein;

said first manipulator means includes a press button and a self-restoring contact opposed to said press button;

said second manipulator means comprises:

a ring-shaped conductive depressing portion; and

a plurality of concentrically disposed second contacts opposed to said ring-shaped conductive depressing portion with a predetermined clearance between said plurality of concentrically disposed second contacts and said ring-shaped conductive depressing portion;

said controller is operable to perform the first screen process by scrolling the information displayed on the display and operable to select a display position according to the signal supplied from said first manipulator means; and

said controller is operable to perform the second screen process, the second screen process being one of a process of scaling up the information, scaling down the information, and switching a screen of information displayed on the display with the selected display position as a reference, according to the circumferential movement signal supplied from said second manipulator means.

~~said circular manipulator includes said first manipulator means and said second manipulator means on a bottom side thereof; and~~

~~said second manipulator means can detect sliding operation of said manipulator in a circumferential direction thereof, and a direction and amount of rotation of said manipulator caused by the sliding operation.~~

Claim 7 (Currently Amended) The portable electronic equipment of Claim 6, wherein;

said controller is operable to perform the first screen process according to an actuation of said self-restoring contact by said press button;

said controller is operable to detect a direction of a circumferential sliding operation of said circular rubber manipulator, and operable to detect an amount of directional rotation of said circular rubber manipulator caused by the circumferential sliding operation; and

said controller is operable to perform the second screen process according to the detected direction and the amount of directional rotation of said circular rubber manipulator.~~said first manipulator means includes a press button and a self-restoring contact opposed to said press button; and~~

~~— actuation of said self-restoring contact by said press button allows the screen on said display means to be scrolled at least vertical and horizontal directions.~~

Claim 8 (Cancelled)

Claim 9 (Cancelled)

Claim 10 (Currently Amended) The portable electronic device~~equipment~~ of Claim 6, ~~wherein including~~ said first manipulator means is arranged at along an outer circumference of said second manipulator means, and wherein said first manipulator means includes a conductive depressing portion and a first contact opposed to said conductive depressing portion.

Claim 11 (Currently Amended) The portable electronic device~~equipment~~ of Claim 6, wherein

~~said second manipulator means detects operation in a circumferential direction of said manipulator; and~~

said first manipulator means is operable to detect~~detects~~ operation within ~~the~~ a same plane in a direction different from that of said second manipulator means.

Claim 12 (Currently Amended) The portable electronic device~~equipment~~ of Claim 6, wherein said circular rubber manipulator~~has~~ includes an indication means for indicating a position of said first manipulator means.

Claim 13 (Currently Amended) The portable electronic device~~equipment~~ of Claim

1, wherein said first manipulator means is a multi-directional switch operated by one of depressing and tilting.

Claim 14 (Currently Amended) The portable electronic ~~device-equipment~~ of Claim 1, wherein said first manipulator means is a track ball.

Claim 15 (Currently Amended) The portable electronic ~~device-equipment~~ of Claim 1 further comprising an integrated ~~built-in~~ display device.

Claim 16 (New) The portable electronic device of Claim 6 further comprising an integrated display device.